

THE COVEY HEADQUARTERS

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This newsletter is aimed at cooperators and sports-people in Missouri to provide information on restoring quail. This is a joint effort of the Missouri Department of Conservation, USDA-Natural Resources Conservation Service, and University of Missouri Extension. If you would like to be removed from this mailing list, go to http://mdc.mo.gov/user_mailman_register to unsubscribe. If you have suggestions for future articles, please contact jeff.powelson@mdc.mo.gov



The name of this newsletter is taken from an old concept.....that a quail covey operates from a headquarters (shrubby cover). If the rest of the covey's habitat needs are nearby, a covey should be present. We are encouraging landowners to manage their quail habitat according to this concept. Use **shrubs** as the cornerstone for your quail management efforts. Manage for a **diverse grass, broadleaf weed and legume mixture and provide bare ground** with row crops, food plots or light disking **right next to** the shrubby area.

MDC predicts quail season to be good in parts of state

With quail season underway, the Missouri Department of Conservation (MDC) advises hunters that overall quail production was about the same as last year, but below the 10-year average. MDC staff note that good hunting can be found in areas with quality habitat in north and west-central portions of the state.

Each August, MDC conservation agents record the numbers of quail they see while driving a 30-mile route – called the roadside index. A total of 110 routes are completed around the state. These numbers are then tallied and grouped by eight geographic areas of quail production – called zoogeographic regions. (SEE RELATED MAP)

According to MDC, this year's statewide average roadside index of 1.7 birds is the same as last year's and 15% below the previous 10-year average. Regionally, the roadside index ranged from 0 in the Northern and Eastern Ozark Border to 5.3 in the Northwest Prairie.

MDC Small Game Coordinator David Hoover points out that, although statewide production was down, three regions showed counts at or above last year's values.

According to Hoover, the Northwestern Prairie region is up 3.5% from last year and 42% over the 10-year average while the Northeast Riverbreaks region is unchanged from last year but still 12% above the 10-year average. The Western Prairie region had the greatest increase from last year at nearly 47% but is still 48% below the 10-year average. The Northern Riverbreaks region was down 26% from last year but is still 23% above the 10-year average.

"Having quality habitat is the most important factor for quail production, but weather also plays a very important, and often unpredictable, role," said Hoover. "This year's quail production highlighted this complicated relationship between habitat and weather. The drier-than-normal conditions this summer likely benefited quail in many areas with good habitat, while being of little or no benefit to those quail in areas with marginal to poor habitat."

He added that it is no secret quail populations are much lower than they once were, but habitat conditions are also much different than 50 years ago when quail numbers were at their peak.

"Continued loss of habitat puts additional stress on the remaining quail populations, which are often isolated in islands of habitat, and thus more susceptible to the negative effects of weather and predation," Hoover said.

He added that the quail community still has much to learn about factors affecting quail production and survival.

"Missouri biologists have recently completed a study in the southwestern portion of the state that has the potential to change how we approach quail management in the future," said Hoover. "This study is examining how specific habitat management approaches affect quail nesting rates and success as well as brood habitat use and survival. This research, combined with other studies recently published from around the quail range, are shedding light on just how crucial the summer months are for quail populations, and how best to manage for the most favorable conditions."

More on the roadside survey

MDC Resource Scientist Beth Emmerich manages the August roadside survey, which has been conducted since 1983.

"It represents the best way we have to track quail populations on a statewide basis," Emmerich said. "The survey does a good job of tracking large-scale population changes and is a good barometer for how more localized populations may also be doing from year to year."

She added, that since 2013, quail populations in areas of good habitat have experienced relatively good production years.

"In 2015, we saw the highest statewide roadside index in nearly a decade," Emmerich explained. "That summer was extremely wet, resulting in many crop fields in northern Missouri left unplanted, and many of which developed diverse annual plant cover that persisted well into August. This abundance of good brood cover led to a very good production year for quail, despite the abnormally wet summer conditions."

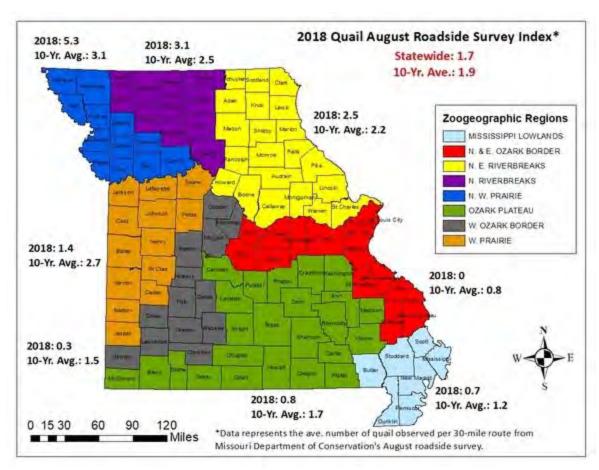
Fall hunting prospects

"In northern and west-central portions of the state, hunters should expect bird numbers at or above last year in areas with good habitat," said Hoover. "Look for large areas of diverse native grass cover intermixed with lots of low-growing woody cover and untilled crop fields and you are likely to find a covey."

Hunting season for quail is Nov. 1 through Jan. 15, 2019. The daily bag limit is eight with a possession limit of 16. Get more information from MDC online at hunting-trapping/species/quail, or from MDC's 2018 Missouri Hunting and Trapping Regulations booklet, available where permits are sold.

For information on places to hunt quail on public lands, check out MDC's Small Game Hunting Prospects online

at huntfish.mdc.mo.gov/sites/default/files/downloads/SmallGameHuntingProspects.pdf.



MDC's annual roadside index of quail numbers taken around the state are grouped into these eight geographic areas of quail production – called zoogeographic regions.

Mark Your Calendar

Prescribed Burn Workshops -

Date: Saturday, January 5, 2019

Time: 9AM-Noon

Location: MU Forage Systems Research Center, Linneus, MO

Lunch is included. Please RSVP by calling the MU Extension office at 660-895-5123.

Date: Tuesday, February 12, 2019 **Time:** 1PM-430PM **OR** 6PM-930PM

Location: Southeast Regional MDC Office, 2302 County Park Drive, Cape Girardeau, MO

Attendees will be invited to optional demonstration burns conducted at a later date. Register for one of

the workshop times by calling 573-290-5730.

Date: Saturday, March 2, 2019

Time: 8AM-Noon, lunch, demonstration burn to follow

Location: Co-Mo Electric Cooperative Conference Room, 29868 Hwy 5, Tipton MO 65081.

Lunch is included. After lunch a demonstration burn will be conducted at the Manito Lake Conservation Area, weather permitting. Please bring leather gloves and leather boots if you plan on assisting with the burn. Pre-registration is required by Tuesday, February 26. Contact Dean Stucker, MDC Private Lands Conservationist, at 573-796-0286 or Dean.Stucker@mdc.mo.gov

Date: Saturday, March 2, 2019

Time: 8AM-11AM, demonstration burn after lunch **Location:** Private farm in Lincoln County, MO

Lunch is included. A demonstration will be conducted, weather permitting. Please bring leather gloves and boots if you plan to assist with the burn. Registration is required by calling 636-528-4877 ext. 3 or

email jeff.esely@mdc.mo.gov

Date: Saturday, March 16, 2019

Time: 9AM-Noon

Location: East Central College, Union, MO

Lunch is included. After lunch a demonstration burn will be conducted at Veteran's Memorial Park in Union, weather permitting. Please bring leather gloves and boots if you plan to assist with the burn.

Registration is required by calling Lia Heppermann at 636-583-2303, ext. 3110.

Date: Wednesday, March 27, 2019

Time: 530PM-930PM

Location: Bass Pro Shop, Independence, MO

To register, contact Randy Keeran at 816-219-3098 or Andy Carmack at 816-622-0900 ext. 1240.

CRP and Wildlife Habitat Management Workshop

Date: Thursday, January 10, 2019

Time: 10AM

Location: Stoddard Co. USDA Service Center, 18450 Ridgeview Lane, Dexter, MO

Topics include disking, herbicide application, prescribed fire, creating wildlife cover, and cost-share opportunities. Registration is required by calling Daniel Bollinger by January 3 at 573-545-3593 ext. 8007.

National Bobwhite Conservation Initiative Coordinated Implementation Program Monitoring Update

Beth Emmerich (Resource Scientist) Lee Metcalf & John Pinkowski (Private Land Conservationists)

The National Bobwhite Conservation Initiative Coordinated Implementation Program (or NBCI CIP for short) is the first ever coordinated effort between multiple states and partners to monitor the effects of habitat management on bobwhite populations over a large portion of the bird's range. This program has a standard protocol for measuring bobwhite and grassland bird responses to management efforts. Part of the protocol includes conducting breeding bird population counts as well as fall covey counts, and habitat measurements as well. Participation in this program has expanded to 47 focal and reference areas in 19 states.

The 2C Quail Focus Area in Carroll County was the first effort in Missouri to be included starting in 2013. In 2017, Missouri added the Bee Ridge Quail Focus Area in Knox County to the national monitoring effort. Missouri Department of Conservation along with partners from the USDA-NRCS and Quail Forever have been working on quail habitat for several years prior to the monitoring effort.

In the 2C Quail Focus Area, habitat accomplishments include over nine miles of edge feathering (30 ft width), 1,600 acres of warm-season CRP, food plots on 5-10% of the area annually, and 30-40% of CRP acres have mid-contract management practices applied each year. This would not get done without USDA Farm Bill Programs, NRCS, MDC, dedicated landowners, and a very active Quail Forever chapter.

We have been monitoring the Bee Ridge Focus Area since 2008. Some of the practices landowners are implementing include adding or improving woody cover (edge feathering, downed tree structures, shrub plantings, thinning of overstocked timbers), warm and cool-season grass renovation (prescribed fire, disking, herbicide treatment), adding food plots, and installing native warm-season grass and wildflowers in whole fields, odd areas and as field borders around crop fields. Thirty-three miles of native grass and wildflower field borders have been installed in the Bee Ridge Quail Focus Area. In total, approximately 1,100 acres of quail habitat have been created. Landowners continue to add new practices annually.

Conditions in the focus area began with the winter of 2017/2018 being cold but precipitation was low, with no major snow events. Landowner reports of quail were excellent from the early spring. Dry conditions throughout the spring and early summer resulted in near drought conditions but good nesting conditions for quail. The past 3 winters have been mild for quail, and springs have been conducive for very productive nesting seasons. In the Bee Ridge Focus Area, we matched our previous all-time high since monitoring began with 78 coveys heard in the focus area versus 20 in the reference area. In the 2C Focus Area, we hit a new high with 114 coveys heard in the focus area compared to only 29 in the reference area. In areas that have good habitat, the landowners are seeing the fruits of their labor with great bird numbers! Stay tuned for additional results of these important monitoring efforts.

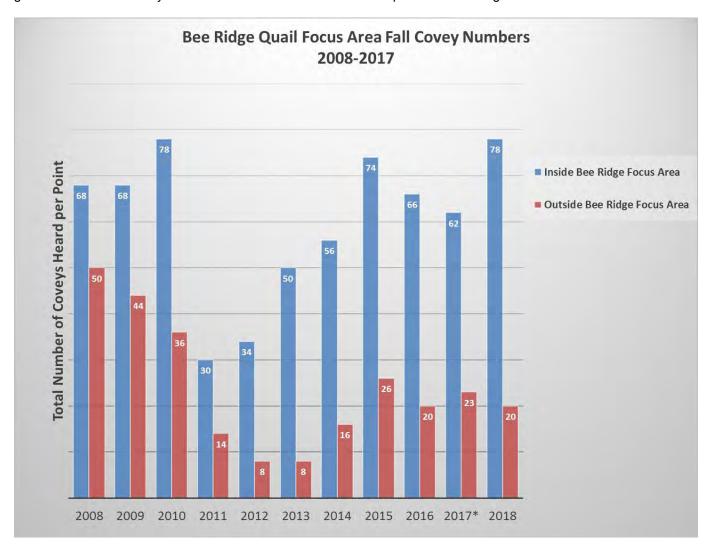


Figure 1. Total number of coveys heard in the Bee Ridge Quail Focus Area compared to the reference area. Note in 2017 we changed 6 points in the reference area to align with the NBCI monitoring protocol.

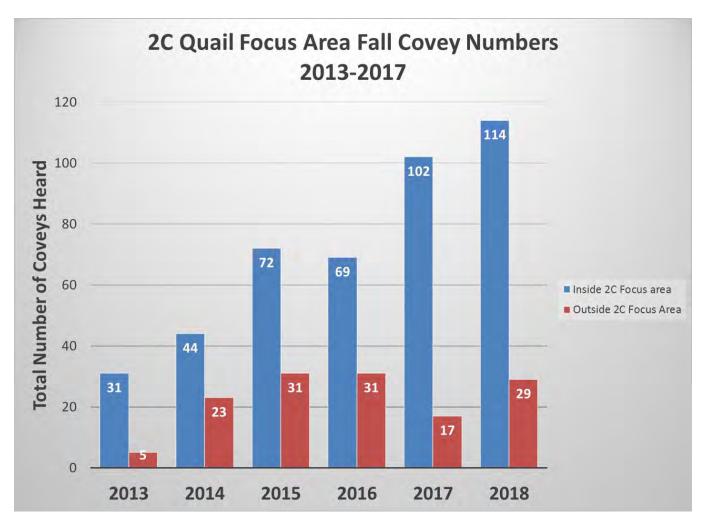


Figure 2. Total number of coveys heard in the 2C Quail Focus Area compared to the reference area.

Winter Covey Headquarter Calendar

December

Order tree and shrub seedlings from the MDC nursery – www.mdc.mo.gov
Burn native warm-season grass fields to set back the grass and encourage annual weeds. Disk your CRP acres now to promote ragweed.

January

Burn your CRP acres to reduce grass competition and increase wildflower abundance.

Plant your wildflower monarch habitat this month.

Drop honeylocust and hedge trees in fencelines for quail covey headquarters. Don't forget to spray the stumps to prevent re-sprout.

February

Interseed wildflowers/legumes in conjunction with your CRP management practices.

Broadcast annual lespedeza over recently burned areas and firelines.

Create covey headquarters by dropping large trees along fencerows and leave them where they fall.

Finish burning your native warm-season grass acres this month.

Complete edge feathering, downed tree structures, and forest stand improvement projects.

Did You Know???

Typically, quail have two daily feeding periods: one beginning at daylight and continuing for several hours, the second beginning during midafternoon and continuing until roosting. Abundance and food-item size influence the length of feeding periods. Adverse weather alters both the length and timing of feeding periods, as will disturbances, particularly those serious enough to cause the birds to flush. Birds that have been flushed may miss a meal entirely.

Quail take practically all their food from or within 8 inches of the ground's surface. Bobwhites are not strong scratchers and are incapable of reaching food that is buried in the soil, snow, or in a heavy accumulation of litter. Fortunately, the list of food quail eat is extremely long. According to various studies of fall and winter bobwhite food habits, the most frequently consumed foods are: seeds of native or naturalized forbs and most grains, such as corn and soybeans. All seeds however, are not of



equal value to quail. Legumes, with high protein levels, are most important during the production season. Important legumes include:

- annual lespedezas, such as kobe and Korean
- perennial lespedezas, such as slender and roundhead (but not the noxious exotic sericea lespedeza)
- · beggarweeds or tick trefoils, and
- · partridge peas.

When the temperature drops, begin chainsaw projects such as edge feathering and fencerow renovation

What a great time of the year! Instead of sitting inside on the weekends, get the chainsaw tuned up and think about escape cover for the mighty bobwhite quail.



Quail need protective escape cover throughout the year and is necessary for eluding predators such as hawks, owls, foxes, and house cats. Protective cover must persist throughout the year, especially during cold weather when thermal protection is needed. The lack of escape cover is often identified as a limiting factor on many farms in Missouri. These areas can be as small as a 30 foot by 50 foot area. This is where the chainsaw comes in, as well as all the safety gear, chaps, gloves, helmet and safety glasses.

Field edges that are overgrown with mature trees, fence rows that have large trees and old ditches are great places to establish the needed escape

cover for quail. Simply cutting the trees down and windrowing them into the edge along the field will give instant cover for quail and other song birds as well as great cover for rabbits. By cutting these canopy trees and allowing the sun to penetrate the ground, will allow annual weeds and shrub species to grow, such as grey dogwood and American plum. Hint; look for areas that already have these species in the undergrowth to start your cuttings. A couple things to remember when making these escape cover

habitats; 1) spray/herbicide treat all cut stumps 2) if any cool season grasses are present, they need to be sprayed with a herbicide to provide bare ground under the downed structures.

By conducting these escape cover habitats along the edges of your farm, you will be providing more useable acres throughout your farm. So get out, tune up and cut down. For more information on quail habitat go to www. mdc.mo.gov

You must sign up for an on-line version of this newsletter

In an effort to streamline our publications inventory and reduce printing costs the Department is moving many of its smaller printed publications to on-line versions only. This will impact all printed newsletters from the Department, including the Covey Headquarters Newsletter. The last printed newsletter will be the summer issue in June.

If you want to continue to receive this newsletter, go to the following website -

http://mdc.mo.gov/user_mailman_register to subscribe to the Covey Headquarters Newsletter via e-mail. The e-mail version will come to you about 4-5 weeks earlier than the printed version. There are several news releases, newsletters and periodicals listed on this website. Enter your email address, then click the quail box under the hunting and trapping tab to start receiving your issue by e-mail.





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